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SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/285,015 08/02/94 PENNETREAU

P SLVAY0829  
EXAMINER

SIEGEL, A

ART UNIT PAPER NUMBER

8

12M2/0427

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DATE MAILED:

04/27/95

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS☐ This application has been examined ☒ Responsive to communication filed on 3/24/95 2/17/95 ☒ This action is made final.A shortened statutory period for response to this action is set to expire 3 month(s), — days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133**Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:**

- |   |   |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited by Examiner, PTO-892.        | 2. <input type="checkbox"/> Notice of Draftsman's Patent Drawing Review, PTO-948. |
| 3. <input checked="" type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449.  | 4. <input type="checkbox"/> Notice of Informal Patent Application, PTO-152.       |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input type="checkbox"/> _____   |

**Part II SUMMARY OF ACTION**1. ☒ Claims 1-20 are pending in the application.

Of the above, claims \_\_\_\_\_ are withdrawn from consideration.

2. ☐ Claims \_\_\_\_\_ have been cancelled.3. ☐ Claims \_\_\_\_\_ are allowed.4. ☒ Claims 1-20 are rejected.5. ☐ Claims \_\_\_\_\_ are objected to.6. ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.8. ☐ Formal drawings are required in response to this Office action.9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).11. ☐ The proposed drawing correction, filed \_\_\_\_\_, has been ☐ approved; ☐ disapproved (see explanation).12. ☐ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received  
☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.14. ☐ Other**EXAMINER'S ACTION**

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Claims 11-20 are rejected under 35 U.S.C. § 112, first paragraph, as the disclosure is enabling only for claims limited to the specific solvents disclosed in the specification and the specific reaction conditions described therein. See M.P.E.P. §§ 706.03(n) and 706.03(z).

The recitation "compounds containing from 4 to 8 carbon atoms" (claim 11) includes aromatics, for instance, which are not supported by the specification.

It is noted that no support for any of the newly added claims has been indicated by applicants and it is not clear where in the specification there is support for the various new limitations such as a temperature range of "between 80° and 110° C" (claims 19 and 20) and "at least 50% by weight" (claim 12).

Claims 1-20 are rejected under 35 U.S.C. § 103 as being unpatentable over Wairaevens et al ('474) in view of Rao (WO 89/12614) for the reasons given in paper No. 4.

Applicants arguments have been carefully considered but are not deemed persuasive.

Applicants urge that "a major problem in this reaction concerns the formation of 'heavies' in high quantities" and that the "present invention solves this problem".

However, no objective evidence has been submitted that such a problem exists or is solved by "the present invention" and no objective evidence has been submitted that the analogous starting

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material of the primary reference would behave differently in the same chemical process. It is noted that such a showing should have been submitted in response to the Office action dated 11/17/94.

The "several related chemical reactions" indicated by applicants are noted but it is pointed out that the instantly claimed process is only involved with the simple reaction between HF and vinyl chloride to produce 1-chloro-1-fluoroethane and/or 1,1-difluoroethane.

The primary reference discloses a process wherein vinylidene chloride reacts in a similar manner with HF to produce the corresponding products. It is not necessary that vinylidene chloride and vinyl chloride behave identically in all situations for the instantly claimed process to be suggested from the disclosure of Wairaeve et al. It is clear that both starting materials are vinyl chlorides containing a carbon atom unsubstituted with chlorine and a carbon atom substituted with chlorine and that both materials react with the HF to produce the corresponding saturated chlorofluoro derivative. The structure of the starting materials are clearly close enough that one of ordinary skill in the art would have had a reasonable expectation that they would have behaved similarly when reacted with HF.

The solvent present in the instantly claimed process reads on and includes the product produced and it is clear that at some

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point in the reaction the claimed amount of product would be present in the reaction zone.

Rao clearly establishes that vinyl chloride and vinylidene chloride would be expected to react similarly with HF.

The motivation for utilizing vinylidene chloride in the process of the primary reference is derived from the reasonable expectation of obtaining a known useful product and from the fact that the chemistry involved, namely addition of HF across the double bond of an olefin, is well known to be applicable to a wide range of starting materials.

The declaration of Francine Janssens under 37 C.F.R. 1.132 has been carefully considered but is not deemed persuasive. As previously pointed out, the instant rejection is not predicated upon the assumption that vinyl chloride and vinylidene chloride are identical reactants but only that there would have been a reasonable expectation that some useful analogous product would be obtained. This expectation is confirmed by the showing in said declaration. Furthermore, the exemplified process of the primary reference has not been compared to the process of the instant claims and therefore the showing is not comparative with regard to yields obtained.

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Applicant's amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-1235.

A.M.S.  
April 26, 1995

  
**ALAN M. SIEGEL**  
**PRIMARY EXAMINER**  
**ART UNIT 1204**